

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A communications system for providing media arbitration via a communications protocol using consecutive communication slots, the system comprising:

a plurality of communication nodes, each node being arranged to communicate frames of data with other nodes of the plurality of communication nodes during a dynamic section associated with communication of dynamic communication slots, and each dynamic communication slot having a communication slot number; wherein

each of the plurality of communication nodes is arranged to communicate, ~~when in use~~, in accordance with a time base comprising consecutively elapsing time ~~units associated with the dynamic communication slots~~, each consecutive time ~~unit slot~~ of the base comprising at least two elapsing sub-time ~~units slots~~ and a transmission action point located at a boundary between two of the at least two sub-time ~~unit slots~~; wherein the each of the plurality of communication nodes is arranged to start and end, ~~when in use~~, transmission of each frame of data at the transmission action point associated with the time base; and

a counter arranged to determine a communication slot number operable to:

increment the communication slot number in response to determining, at the end of a

dynamic communication slot, that no message has been transmitted or received at
a first node during the dynamic communication slot; and if no communication is
ongoing at the end of a dynamic communication slot and

to suspend incrementing of the communication slot number if communication is ongoing
at the end of the dynamic communication slot in response to determining, at the
end of the dynamic communication slot, that a message has been transmitted or
received at the first node during the dynamic communication slot.

2. (Currently Amended) A communication node for use with a multi-node distributed communications system utilising a communications protocol using consecutive communication slots, the node being arranged to communicate frames of data with other nodes of the system

during a dynamic section associated with communication of dynamic communication slots, and each dynamic communication slot having a communication slot number; wherein

the node is arranged to communicate, ~~when in use~~, in accordance with a time base comprising consecutively elapsing time ~~units associated with the dynamic communication slots~~, each consecutive time unit of the time base comprising at least two elapsing sub-time ~~units slots~~ and a transmission action point located at a boundary between two of the at least two sub-time ~~units slots~~;

the node is also arranged to start and end transmission, ~~when in use~~, of each frame of data at the transmission action point associated with the time base; and

the node comprises a counter arranged to determine the communication slot number, the counter operable to:

-increment a communication slot in response to determining, at the end of a dynamic communication slot, that no message has been transmitted or received at a first node during the dynamic communication slot; and number if no communication is ongoing at the end of a dynamic communication slot and to
suspend incrementing of the communication slot number in response to determining, at the end of the dynamic communication slot, that a message has been transmitted or received at the first node during the dynamic communication slot if communication is ongoing at the end of the dynamic communication slot.

3. (Currently Amended) A method for providing media arbitration in a multi-node distributed communications system via a communications protocol using consecutive communication slots, the method comprising:

each node of the system communicating frames of data with the other nodes during a dynamic section associated with the dynamic communication slots, each dynamic communication slot having a communication slot number;

providing a system wide time base comprising consecutively elapsing time ~~units associated with the dynamic communication slots~~, each consecutive time ~~unit slot~~ of the time base comprising at least two elapsing sub-time ~~units slots~~ and a transmission action point located at a boundary between two of the at least two sub-time ~~units slots~~ and the transmission of each frame of data starts and ends at the transmission action point; and

each communication node determining the communication slot number by incrementing the communication slot number if no frame of data is communicated at the end of has been communicated during a dynamic communication slot and suspending incrementing of the communication slot number if a frame data is has been communicated at the end of during the dynamic communication slot.

4. (Previously Presented) The system of claim 1, wherein the time base is associated with static communication slots.

5. (Previously Presented) The system of claim 4, wherein a predetermined number of timeslots are utilised in respect of each static communication slot.

6. (Previously Presented) The system claim 1, wherein a dynamically allocated number of timeslots are utilised in respect of each dynamic communication slot.

7. (Previously Presented) The system of claim 6, wherein each dynamic communication slot in which frame transmission takes place is divided into alternating matching and mismatching time slots, the matching time slots being valid transmission slots.

8. (Currently Amended) The system of claim 1, wherein each node comprises a receiver to set, when in use, a current communication slot number in response to whether a communication start is detected in a matching or mismatching time slot.

9. (Previously Presented) The system of claim 1, wherein each node has an associated communication slot number and is operable not to transmit in dynamic communication slots having communication slot numbers different than the associated communication slot number.

10. (Previously Presented) The system of claim 1, wherein each node comprises a transmitter to extend, when in use, a transmission to a transmission action point.

11. (Previously Presented) The system of claim 10, wherein the transmission is by transmission of a busy signal.

12. (Currently Amended) The system of claim 1, wherein each node comprises a receiver to adjust, ~~when in use~~, the time base in response to a frame identity of a frame being communicated in a dynamic communication slot.

13. (Previously Presented) The method of claim 3, wherein the time base is associated with static communication slots.

14. (Previously Presented) The method of claim 13, wherein a predetermined number of timeslots are utilised in respect of each static communication slot.

15. (Previously Presented) The method of claim 3, wherein a dynamically allocated number of timeslots are utilised in respect of each dynamic communication slot.

16. (Previously Presented) The method of claim 15, wherein each dynamic communication slot in which frame transmission takes place is divided into alternating matching and mismatching time slots, the matching time slots being valid transmission slots.

17. (Previously Presented) The method of claim 3, further comprising:
setting a current communication slot number in response to whether a communication start is detected in a matching or mismatching time slot.

18. (Previously Presented) The method of claim 3, wherein each node has an associated communication slot number and is operable not to transmit in dynamic communication slots having communication slot numbers different than the associated communication slot number.

19. (Previously Presented) The method of claim 3, further comprising:
extending a transmission to a transmission action point.

20. (Previously Presented) The method of claim 19, wherein the transmission is by transmission of a busy signal.